

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for determining that an image element is likely to be self-luminous, the method comprising:
 - a. determining image element characteristics;
~~comparing the characteristics of said image element to those for known self-luminous elements wherein said comparing comprises at least one act taken from the set consisting of:~~
 - ~~(i) comparing the proximity of said image element to image boundaries with the proximity of known image elements to their boundaries;~~
 - ~~(ii) comparing the color characteristics of said image element to characteristics of a known illuminant, and~~
 - ~~(iii) comparing the luminance characteristics of said image element to characteristics of known self-luminous elements;~~
 - b. analyzing said image element characteristics;
 - c. assigning a self-luminosity weight factor to said image element when said image element characteristics indicate a likelihood of self-luminosity;
 - d. determining the spatial proximity of said image element to an image spatial boundary;
 - e. modifying said self-luminosity weight factor when said image element is spatially proximate to said image boundary; and
 - f. estimating a color balance correction for at least a portion of said image wherein said correction is based on said weight factor.

2. (currently amended) A method for determining that an image element is likely to be self-luminous, the method comprising:
 - a. determining image element characteristics;
 - b. comparing the color characteristics of said image element to those found under a known illuminant;
 - c. comparing the luminance characteristics of said image element to those found under a known illuminant;
 - d. determining the spatial proximity of said image element to an image spatial boundary; and
 - e. classifying said image element as likely to be self-luminous when ~~at least one~~ of said color characteristics, and said luminance characteristics and said spatial proximity meet a ~~criteria~~ on for self-luminous elements.
3. (currently amended) A method as described in claim 2 ~~further comprising measuring the proximity of said image element to an image boundary and wherein said classifying further comprises evaluation of said proximity to determine whether said criteria are met~~ wherein said image spatial boundary is the top edge of said image.
4. (currently amended) A method for estimating the illuminant of an image, the method comprising:
 - a. determining image element characteristics;
 - b. assigning a weighting factor to each image element according to its likelihood of being self-luminous, said likelihood being based on said characteristics;
 - c. modifying said weighting factor based on the spatial proximity of said each image element to an image spatial boundary;
 - d. estimating ~~an~~ illuminants for a plurality of image elements;
 - e. estimating an image illuminant based on said illuminants for each image element adjusted by said weighting factors.

5. (original) A method as described in claim 4 wherein the effect of said weighting factor is proportional to the likelihood that an image element is non-self-luminous.
6. (currently amended) A method of correcting color-balance in an image, the method comprising:
 - a. obtaining image element characteristics for an image;
 - b. assigning a weighting factor to each image element according to its likelihood of being self-luminous
 - c. determining an element illuminant for each of said image elements;
 - d. estimating an image illuminant based on said image element characteristics and said weighting factors said element illuminants adjusted by their corresponding weighting factors; and
 - e. correcting image color-balance for said estimated image illuminants based on said image illuminant.
7. (currently amended) A method as described in claim 6 wherein said correcting comprises:
 - a. correcting image elements that are not likely to be self-luminous ~~for the estimated illuminant;~~ and
 - b. omitting said correcting image color-balance for image elements that are likely to be self-luminous.
8. (original) A method as described in claim 6 wherein said correcting comprises:
 - a. correcting said image elements according to their likelihood of being self-luminous wherein a full correction is applied to elements that are least likely to be self-luminous, no correction is applied to elements that are most likely to be self-luminous and a partial correction is applied to elements that fall between these limits.

9. (currently amended) A set of computer-executable instructions for determining that an digital image element pixel is likely to be self-luminous, the method comprising:
- a. determining image element pixel characteristics;
 - b. comparing the characteristics of said image element pixel to those for known self-luminous elements pixels wherein said comparing comprises ~~at least one act taken from the set consisting of:~~
 - (i) comparing the spatial proximity of said image element pixel to image spatial boundaries ~~with the proximity of known image elements to their boundaries,~~
 - (ii) comparing the color characteristics of said image element pixel to those of a known illuminant, and
 - (iii) comparing the luminance characteristics of said image element pixel to those of known self-luminous elements pixels, and
 - c. classifying said image element pixel as likely to be self-luminous when ~~at least one of~~ said proximity, said color characteristics and said luminance characteristics meet a criteria for self-luminous elements pixels.

10. (currently amended) A computer system for determining that an image element is likely to be self-luminous, the system comprising:

- a. a storage for storing image element characteristics;
- b. a processor for comparing the characteristics of said image element to those for known self-luminous elements wherein said comparing comprises ~~at least one act taken from the set consisting of:~~
 - i. comparing the spatial proximity of said image element to image spatial boundaries ~~with the proximity of known image elements to their boundaries,~~
 - ii. comparing the color characteristics of said image element to those of known illuminants, and
 - iii. comparing the luminance characteristics of said image element to those of known self-luminous elements, and
- c. a classifier for classifying said image element as likely to be self-luminous when ~~at least one of~~ said proximity, said color characteristics and said luminance characteristics meet a criteria for self-luminous elements.

11. (new) A method as described in claim 6 further comprising modifying said weighting factor when the spatial location of said image element is proximate to an image spatial boundary.